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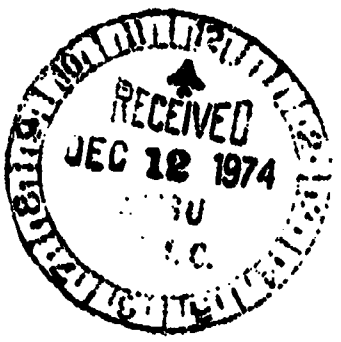
ABSTRACT

Gallup Polls conducted between 1966 and 1972 indicated that the percentage of persons stating they would prefer living in a city has steadily declined, reaching the all-time low of 13 percent in 1972. Interviews conducted with a sample of 1,806 Americans showed that while one-third of the respondents currently live in towns, villages, or rural areas, almost 60 percent would prefer to. Data collected in various state surveys are generally supportive of the national polling data. A statewide sample of over 3,000 Washington State residents indicated some degree of preference for life in areas characterized by smaller populations and more open country. When combined with a series of other factors, this preference may contribute to significant pressures for migration to areas that provide easy access to rural amenities. This paper discusses the hypothesis that such factors as reduced social overhead costs of space, the fact that outdoor amenity goods are superior goods, the increased independence of income from location, and the increased costs in high density areas will combine with the residential preferences that are already evident to create increased pressures for migration toward rural areas. (NQ)



DEVELOPING PRESSURES FOR MIGRATION TOWARD RURAL AREAS

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I. INTRODUCTION: POPULATION DISTRIBUTION AND RESIDENTIAL PREFERENCES

Concern and dissatisfaction have been expressed from many quarters about the continued concentration of the population of the United States in large cities. Many have come to accept the view that the problems in these cities (crimes, riots, congestion, pollution, growing fiscal problems, etc.) must be caused by their size and that as the population in the cities continues to increase, they will become more "politically unmanageable, socially intolerable and economically inefficient."

The United States has been characterized for several decades by heavy migration from rural to urban areas. This has contributed greatly to urban and suburban sprawl with the associated problems alluded to above. At the same time, it has contributed significantly to the problems of rural America. For example, many rural areas have experienced the migration of up to 70 percent of the high school age youth, creating population structures that are top-heavy with old people. As noted by Lee and others[1], there are now in some counties more people between 70 and 80 years of age than between 20 and 30, and in as many as 300 counties there have been years in which there were more deaths than births.

Most economists agree that these tend to be medium-run problems faced during a period of transition away from labor intensive agriculture and that if such shifts had not taken place, problems associated with rural poverty

would be considerably greater than those currently faced in rural areas. Nevertheless, a significant amount of recent research has emphasized the interrelationship between population shifts on the one hand and current urban and rural problems on the other. In response to the recognition of this hypothesized interrelationship, numerous reports of Congressional and Presidential Task Forces and committees, as well as reports from the academic community have recommended action programs which contain, either implicitly or explicitly, the goal of reversing the migration flow. The following objectives of the 1968 National Manpower Conference recognize the problem.

> . . . It has become increasingly clear that any solutions to the already difficult situation of the cities must be accompanied by new efforts for dealing with poverty, inadequate education, and lack of job opportunity in rural American. Local, state, and national government policies, as well as those of labor, business, and education must be restructured and reconstituted or the problem will continue unabated.
>
> Large numbers of rural youth, often ill-prepared to compete in urban society, each year leave their homes in search of opportunity in the cities. More often than not frustration and alienation result, along with an additional strain on already overburdened welfare and employment rolls . . . . There is a pressing need to develop new concepts and new ideas for dealing effectively with the problem. One of the conference objectives is to stimulate research in this area among the various university and private research organizations in the country.[2]

Any reversal of the population flow away from rural areas, however, implies a willingness or interest on the part of a significant number of urban residents to move to a rural area. It also implies that there are important characteristics about rural areas that make them appealing, desirable, and feasible in terms of the costs associated with relocation. Residential preference data accumulated over a number of years make it clear that, at least in terms of the attitudes held by a substantial and growing number of people, the willingness is there. This paper addresses the question of changing feasibilities associated with relocation.

The most recent Gallup Poll[3] on the issue of residential preference is presented in Table I. A clear majority of persons sampled state they would prefer living on a farm or in a small town. The summary data presented in the second part of the table taken from polls conducted between 1966 and 1972 indicate that the percentage of persons stating they would prefer living in a city has steadily declined, reaching the all-time low of 13 percent in 1972.

Table I

A recent Potomac Associates publication entitled State of the Nation[4] provides much more extensive data on this question of residential preferences. The data for the study come from extensive interviews conducted with a sample of 1,806 Americans. Table II shows the preferred residential location of the respondents compared with present locale. In giving their response, subjects were asked to select the residence of their choice without regard to economic, social, or other barriers. The results show that while one-third of the respondents currently live in towns, villages, or rural areas,

almost 60 percent would prefer to. On the other hand, while six of ten currently live in cities or suburbs, only four of ten select these as the ideal location. Throughout the analysis, people living in small communities and rural areas expressed greater satisfaction with their current area of residence.

Table II

Data collected in various state surveys are generally supportive of the national polling data. For example, Albrecht[5] found that residents of three rural counties studied in Utah were much more willing to express satisfaction with their location than were residents of an urban (Salt Lake) county. Seventy-four percent, 77 percent, and 81 percent of the respondents from the three rural counties stated that they were very much satisfied living where they lived, despite the almost total absence of health care amenities in two of the counties. On the other hand, only slightly more than half as many (42 percent) of the urban residents state they were very much satisfied living where they did.

Table III

There was a high degree of consensus among the residents that urban Salt Lake County was the area in which there was the least degree of satisfaction with community. Even within the Salt Lake sample, a larger percentage picked this area than any other as where they would least like to live. Rural respondents consistently rated their communities high on such characteristics as friendliness of the people, access to the out-of-doors, and the absence of a polluted environment. The latter two factors

were items that urban respondents generally agreed were lacking in their area.

Survey data collected from a statewide sample of over 3,000 Washington State residents by Dillman and Dobash[6] also indicate some degree of perference for life in areas characterized by smaller populations and more open country. While Dillman and Dobash use their data to argue that there is no strong sentiment in the state of Washington for a major "back to the country" movement, their findings still indicate that more people would prefer a semi urban region (characterized by a city of 10,000 to 49,999 a few small towns, and much open country) than any other (Table IV). Further, their data show that the percentage of persons who would like to leave their present community if given the opportunity goes down for each decrease in size of present community and that the degree of satisfaction with present community goes up with each decrease in size of present community.

Table IV

When looking at the relationship between quality of life variables and community satisfaction, the Dillman and Dobash results indicate that responses clearly favor medium and smaller size communities. On none of the 18 quality of life measures used were cities of 150,000 or larger ranked higher than smaller size communities. Whichever item was emphasized, the respondents believed that a city of less than 150,000 provided the best quality of life.

Individual location decisions would appear to result from the intention of improving ones utility or satisfaction level. In brief, people move to

make themselves, in terms of their values, better off. Thus a move from one point in space to another could be motivated either by an increase in income attainable at some other place, or by a net reduction in the "prices" of commodities which an individual desires. Both increase real income. In either situation, the anticipated increase in satisfaction must be at least equal to the inconvenience and costs associated with r[illegible]ation. There may, of course, be some group of people for whom the move itself has a positive value. We do not, however, take these psychological nomads into account here.

An individual could increase his net satisfaction by moving in either of two circumstances. First he can attain a higher utility surface when relocation increases the resources available to spend on all classes of goods. Alternatively, he can achieve the same end by relocating in an area in which at least one set of goods is less expensive while other prices are unchanged (or increase less than the first set decreases). Obviously a person's best strategy is to seek out those opportunities which provide increases in income and/or reductions in prices which result in improved utility or satisfaction levels. This, of course, is precisely the argument employed by international firms who recruit Americans for foreign assignments.

The above data and the accompanying argument suggest a preference, which, when combined with a series of other factors that are now becoming evident, may contribute to significant pressures for migration to areas that provide easy access to rural amenities. The reasons for this belief together with a discussion of the other factors involved, is presented below.

II. PRESSURES FOR CHANGE

A. REDUCED SOCIAL OVERHEAD COSTS OF SPACE

It has long been recognized that areas remote from major population centers entail high social overhead costs in terms of transportation and communication. If we follow Levy[7] and define a modernization index as the ratio of inanimate power to animate power in a society, it is clear that the U.S. is becoming increasingly modernized. Further, there is substantial evidence that with an increase in modernization an ever greater percent of transportation and communication costs are switching costs, i.e., costs at the terminal rather than the costs of actually moving goods. This phenomenon is perhaps most obvious in the rates of long distance telephone calls, but it also appears in the transportation of people, goods or messages (unless a regulatory agency intervenes to keep the underlying changes from being evidenced in the market). In part, the reason for this development is that technological innovations and intensive capitalization are more likely to occur in the moving stage rather than the terminal stage (which remains relatively labor intensive).

As a result of the above, the marginal costs of incremental distances are reduced, i.e., the switching or terminal stage is a decreasing percentage of the total cost as distance increases while average costs per unit of distance are declining. Hence, at the margin of the additional mile, the social and private overhead costs of distance are reduced as cost reducing technologies are accepted. To the degree that transportation and communication charges contribute to costs of space, the relative importance of spatially related costs decline and remote areas become less expensive (in the general sense of that term) places in which to live.

The development of new technologies offers the promise of a reduction in other aspects of the costs associated with space. An example can be cited from the field of health service delivery. It has been demonstrated from data collected in several states that while rural areas do not fare badly in terms of physicians and hospital beds per some population unit, they fare very poorly in terms of medical personnel and facilities per geographic unit, e.g., per 100 square miles. Simple geographic access becomes a significant cost associated with space. Several innovative programs are being tested which would significantly reduce this problem for many types of health needs. One example is the establishment of health care units in rural areas having two-way audio and visual connections with major medical centers. The health care unit can be manned by registered nurses or paramedics and the diagnosis can be made by an M.D. in the medical center who can both observe and communicate with the patient via the closed-circuit connection. When necessary, the physician can have the patient transported to the medical center utilizing air service in emergency cases.

Such innovative programs promise important reductions in service-delivery problems that are associated with large geographic areas having sparse population.

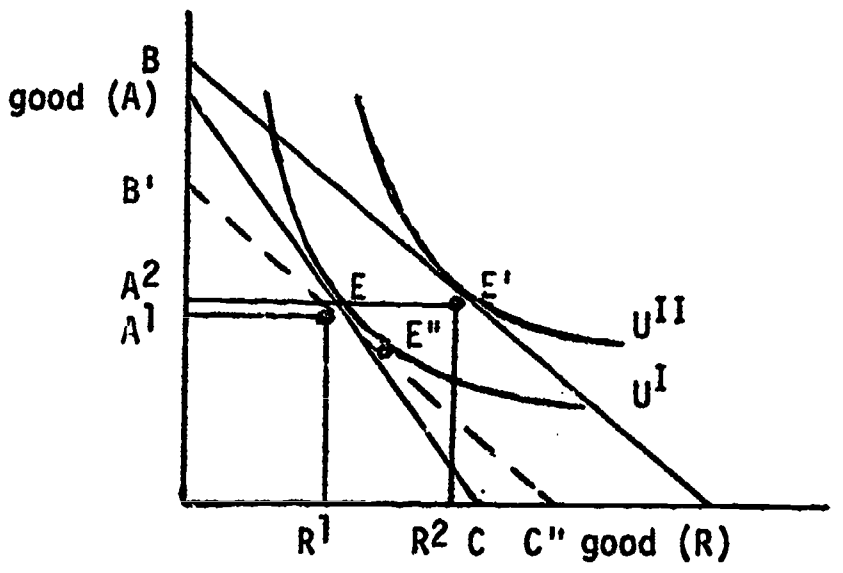
B. OUTDOOR AMENITY GOODS AS "SUPERIOR GOODS"

Concurrent with the above change is the fact that amenities such as outdoor recreation goods are "superior" goods. In application, the actual demand schedule for amenities such as outdoor recreation increases disproportionately with increases in income. In economic terms, when income is increased the demand curve for these goods (whatever its shape while sloping downward to the right) is shifted to the right and does not intersect the earlier curve. Given that the U.S. and other modernized societies will

probably be characterized by increased affluence over at least the medium run, it appears that the demand for outdoor amenities will continue to increase, although not indefinitely at the current suggested rate of about 8 percent per year. Hence, those areas that offer readily available access to a pleasing mix of outdoor recreational experiences have a characteristic which makes them attractive residential locations.

For example, consider the city dweller who finds that expenditures for rural-supplied amenities are a significant portion of his budget. Neglecting moving costs he would be willing to trade money income equal to the real income gain which would result from relocating in a rural setting where such amenities were available at reduced prices or procurement costs. People on the East Coast and Midwest who hunt, fish and ski in the Rockies are obvious examples.

This decision process (see figure) can be demonstrated using conventional consumer demand theory in which consistent ordinal preferences U_I, U_{II} obtain. For the sake of exposition, let rural amenities be designated by (R), all other goods by (A), and the budget constraint by (BC). In his initial location (urban) we can assume that he finds himself in a position of maximum satisfaction as between goods (R) and (A), given the budget constraint (BC), at point (E) on U_I. At this point he takes (A_I) of (A) and (R_I) of (R).



If we assume that technological improvements in transport result in reduced costs to consumers, in delivering (A) so that the price of (A) will not be altered by a locational change from urban to rural, and at the same time the price of good (R) is reduced, then it is clear that the consumer can increase satisfaction by moving. Such a position of greater satisfaction is shown at point E' which corresponds to consumption rates of (R_2) and (A_2) respectively, consistent with the higher utility schedules U_{II}. Note that this new "improved" position is attainable only because the unit costs of (R) goods have declined as a result of his relocation and that such a relocation did not result in higher unit costs for other commodities contained in (A). Maximum income sacrifice in terms of A which our consumer would be willing to make, or the bribe he would be willing to pay in order to live in the rural setting is equal to the distance between budget line (BC') and (B'C"). If the full amount of the bribe were paid, our consumer would find himself at exactly the same level of satisfaction U_I at E" as before relocation but with a different combination of (A) and (R) because their relative prices have changed i.e., (A) goods are now relatively more expensive and (R) goods relatively less expensive.

C. INDEPENDENCE OF INCOME FROM LOCATION

Apparently, as a society becomes increasingly modernized, an increasing proportion of people have a decreasing dependence on a specific residential location for their income. Most obvious are persons such as military personnel who can retire after 20-30 years and obtain their income in any area served (even indirectly) by the U.S. mail, and governmental employees

who have option of retiring at one-half pay after twenty years of service. In addition, as the public service sector of the society increases, there are an increasing number of locational options for professionally trained persons. As an example, we are told by natives that the "remote" logging-ranching community of Hamilton, Montana recently developed over 100 positions for graduate level research and administrative personnel due to the development of a new Public Health Service research center. Further, a number of companies whose product requires the movement of either information or small physical volumes of highly valued products (and hence who tend to employ highly skilled and highly paid personnel) find the possibility of locating in relatively remote areas within easy access of outdoor amenities increasingly attractive. These "footloose" industries can offer an attractive environment as a side payment for employment.

Discussion of individual locational decisions is incomplete, however, without consideration of the interdependence and non-symetric dependence which exists between individuals and firms in their respective location decisions. It seems obvious that only a very small portion of the population would be sufficiently footloose to permit their existence at any randomly drawn point in space without regard for employment as a source of income. Thus one could expect individual location decisions to exhibit high relative dependence on location of new employment opportunities. Firms, on the other hand, can be either market or resource oriented depending primarily on the costs of space, value of product per unit of weight and the extent of vertical integration represented within the firm. If processing reduces transportation costs, firms producing heavy-mass-low-value commodities will be resource oriented. Impetus for migration will

occur at the supply point of the resource. Alternatively, high value commodities which have high transport costs (including safety and perishability) will be produced in close proximity to people and ultimate markets. Those with high value - low transport cost have greater latitude for locational decisions. If the firms in the last category typically employ a highly educated, well paid labor force, and given that these are the people for whom rural amenities have a high marginal utility, we would expect these firms to be disproportionately represented in relocations toward areas with rural amenities.

Aside from the above possibilities which involve relatively affluent personnel, the movement toward a national equalization of welfare payments may encourage those who live in "voluntary poverty," i.e., those who seek to maximize benefits other than cash flow, to seek out areas marked by high amenity availability and to subsist on welfare and a modern form of a hunting-gathering scavenging economy.

D. INCREASED SOCIAL OVERHEAD IN HIGH DENSITY AREAS

The above topics point out factors which tend to make rural areas in close proximity to outdoor amenities increasingly attractive. In concert, these factors constitute a "pull" for classes of people with certain preference sets, preference sets that are becoming increasingly common, toward relatively rural areas. In addition to these factors, there is a "push" for at least some classes of people away from large urban complexes.

Many intellectuals and reformers have suggested that the development of large, highly centralized facilities and services will result in improvement in efficiency and effectiveness in the public sector.

Data, however, suggests that fragmented, localized arrangements often result in both lower cost and in the production of public services that bear a closer resemblance to citizen's preferences than do larger, more centralized systems.[8]

It is clear that as population density increases, an increasing effort must be spent in social overhead and in attempts to preserve the remaining amenities of the area. Thus, while there are economies of scale for the provision of several public services (e.g., fire fighting, hospital equipment,) the relationship is curvilinear. Beyond a certain level, the unit cost of nearly all public services increases. Thus, given that public services and goods (which tend to be treated as free goods by the individual consumers) are not free but are provided by taxes, when controlling for level of service the tax rates tend to be higher in large urban complexes than in smaller areas.[9]

Given the above conjunction of "better" provision of services (services more closely matched with preferences of citizens) in smaller areas with lower tax rates, there is a "push" away from large urban complexes as well as a series of "pulls" toward certain rural areas.

These forces will impact especially upon persons whose incomes are independent of location. One may have to live in Chicago or St. Louis if he is in a business dependent upon proximity to a large urban complex, but if his income is from stocks and/or a retirement plan, a lower proportion of his income will go toward social overhead if he is in a more rural area.

III. IMPLICATIONS

If the above suggestions are indeed operative, and if they are not swamped by other considerations, then we should find a growing pressure for migration toward rural areas. It is clear that the residential preference data presented earlier do not necessarily imply actual migration to the suggested areas. Such migration requires a conjunction of preference and opportunities and the latter may only be beginning to develop, though we propose the process may be speeded up by factors discussed earlier.

Further, if the shift toward outdoor amenities as superior goods is substantial, we would expect a movement toward these areas even when such a move involves a decline in money income. Given our assumption that people move to make themselves "better off," such moves suggest that those who move have a view of "wealth" that encompasses more than money. It is an important principle of labor economies that wage differentials may contain side payments. The practices of using changes in wages as estimates of net gains or losses associated with migration implicitly assumes that nonmonetary factors are either ignored or trivial. In a yet to be published paper criticizing this approach, Stroup[10] cites several proponents of the above position. For example, Bowman and Myers state that "We assume . . . that an individual will not normally migrate unless his potential discounted earnings stream in the new area is going to be at least as high as that at the area of origin."[11] This, and the other examples cited by Stroup, appear to be cases in which the researchers, in a search for readily quantifiable data, ignore factors of substantial compelling importance to those who are the object of research. It seems clear that when an individual elects to move and accepts a lower monetary income as a result of the move, he provides

strong evidence that the nonmonetary aspects of the move were strongly positive and assume an importance at least equal to the loss in money income.

Evidence that such movement trends are already developing can be found in a examination of population shifts between the 1960 and 1970 Census. During this period, nonfarm population in nonmetropolitan areas increased more rapidly than did the population of the U.S. as a whole (19.3 percent compared with 13.3 percent). This is depicted in Figure 1.

Figure 1 About Here

These shifts have resulted in a major reversal of former population losses in such nonmetropolitan areas as the Ozark region of western Arkansas, eastern Oklahoma, and southwestern Missouri as well as in such other diverse nonmetropolitan regions of the country as the lower Tennessee Valley, west central Kentucky, the western slope of the Rockies in Colorado, and the northern half of the Lower Peninsula of Michigan.[12]

Growth in these areas is generally consistent with the reasons hypothesized in this paper. For example, the rapid growth area of the Ozarks is characterized by major resort and retirement developments around reservoirs as well as the Arkansas River navigation project.[13] The fact that much of this migration to the Ozarks region has been composed of younger working people (the migration rate of persons 35-39 years old in 1970 was 25 percent) is particularly significant. Beale notes that these are people who have already lived elsewhere but have found their previous location lacking in terms of the total social environment. Therefore, many were willing to take cuts in dollar income in order to have access to other types of amenities that they apparently found in this particular nonmetropolitan environment.

In summary of our argument, polling data on residential preferences have indicated for years that a significant percentage of the U.S. population would prefer living in other than big city areas. However, locational preferences alone do not mean actual migration because such preferences must be found in conjunction with other opportunities. It is our hypothesis that such factors as (1) reduced social overhead costs of space; (2) the fact that outdoor amenity goods are superior goods; (3) the increased independence of income from location; and (4) the increased costs in high density areas, will combine with the residential preferences that are already evident to create increased pressures for migration toward rural areas. Research is called for to test the validity of these hypotheses.

TABLE I

RESIDENTIAL PREFERENCES IN THE UNITED STATES

	SELECTING EACH PLACE AS IDEAL PLACE TO LIVE (%)
City	13
Suburbs	31
Small Town	32
Farm	23
No Opinion	1

	SELECTING CITY AS IDEAL PLACE TO LIVE (%)
1966	22
1970	18
1971	17
1972	13

Source: Gallup Poll data reported in Salt Lake Tribune, December 17, 1972, p. A-15

TABLE II

	Present Locale	Preferred Locale
	(in Percentages)	
City	36	18
Suburb	22	22
Town or Village	15	19
Rural Area	18	38
Don't Know	9	3
	100	100

Source: William Watts and Lloyd A. Free (eds.), State of the Nation, Universe Books, New York, 1973.

TABLE III

SATISFACTION WITH COMMUNITY IN FOUR UTAH COUNTIES

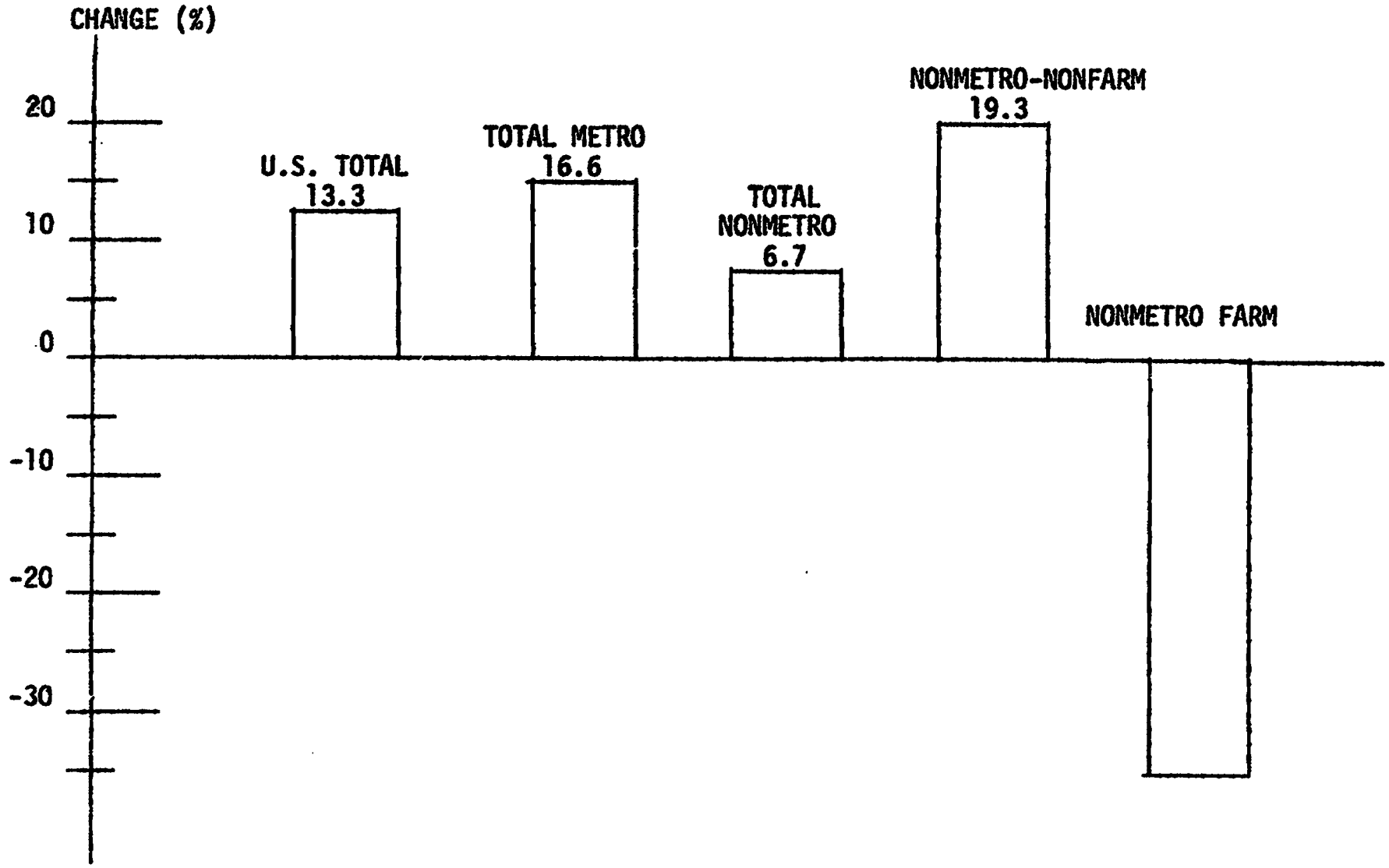
COUNTY	COMMUNITY SATISFACTION			
	Not at all Satisfied (%)	Not very much Satisfied (%)	Pretty much Satisfied (%)	Very much Satisfied (%)
Wayne (rural)	1.4	0.0	21.7	76.8
Piute (rural)	1.9	0.0	24.1	74.1
Beaver (rural)	1.7	3.4	13.6	81.3
Salt Lake (urban)	0.0	9.8	48.6	41.6

TABLE IV

REGION IN WHICH MOST WASHINGTON STATE RESIDENTS WOULD PREFER TO LIVE

KIND OF REGION	MOST LIKE TO LIVE (%)	LEAST LIKE TO LIVE (%)
LARGE METROPOLITAN: Contains city of 500,000 or more, many suburbs, very little open country	2.9	81.5
MEDIUM METROPOLITAN: Contains city of 150,000-499,999, several suburbs, same open country	14.0	.3
SMALL METROPOLITAN: Contains city of 50,000-149,999, few suburbs, considerable open country	21.0	.3
SEMIURBAN: City of 10,000-49,999 few smaller towns and contains much open country	28.9	.4
SEMIRURAL: Contains city of 2,500-9,999, one or two smaller towns, mostly open country	19.2	1.1
RURAL: Contains two of less than 2,500 surrounded entirely by open country	14.0	16.3
Total	100.0	99.9

Source: Don A. Dillman and Russell P. Dobash, "Preferences for Community Living and Their Implications for Population Redistribution," Washingtion Agricultural Experiment Station Bulletin No. 764, Washington State University, November, 1972



Source: Calvin L. Beale, "Rural and Nonmetropolitan Population Trends of Significance to National Population Policy," Economic Research Service U.S. Department of Agriculture, 1972.

Figure 1. U.S. Population Change
1960-1970

FOOTNOTES

[1]E. S. Lee, J. C. Bresee, K. P. Nelson, and D. A. Patterson, An Introduction to Urban Decentralization Research, Oak Ridge National Laboratory, Oak Ridge, Tennessee, (June 1971).

[2]National Manpower Conference, The Rural to Urban Population Shift: A National Problem, Sponsored by U.S. Senate, Committee on Government Research, (Washington, D.C.: U.S. Government Printing Office, 1968).

[3]Gallup Poll: "Americans Disenchanted with City Life," Salt Lake Tribune, (December 17, 1972), p. A-15.

[4]William Watts and Lloyd A. Free, State of the Nation, Universe Books, New York, 1973.

[5]Stan L. Albrecht, "Rural Development: Its Dimension and Focus, "Utah Science, Vol. 33, (December 1972), pp. 115-120.

[6]Don A. Dillman and Russell P. Dobash, "Preferences for Community Living and Their Implications for Population Redistribution," Washington Agricultural Experiment Station Bulletin #764, Washington State University, (November 1972).

[7]Marion J. Levy, Jr., Modernization and the Structure of Society, Princeton, Princeton University Press, (1966).

[8]James L. Sundquist, "Where Shall They Live?" The Public Interest, Vol. 18, (Winter 1970), pp. 88-100.

[9]This point has been neglected for many years. Most reformers have argued for increased centralization and increased scope of service provision. This assumes, quite incorrectly that attaining economies of scale is a continuous function: Current work by Ostrom and Ostrom on the Indianapolis "Minigov" experiment deals with this set of questions. See also Ezra J. Misham, The Costs of Economic Growth, Pragyer, 1967 (Chapter 7, "The External Diseconomies of Built up Areas") and especially tables 1 and 3 of Richard D. Lamm, "Local Growth: Focus of a changing American Value", Equilibrium, Vol. 1, No. 1, p. 5.

[10]Richard Stroup, "A Note on Methodology in the Evaluation of Returns to Migration," Montana State University, unpublished paper, (1971).

[11]M. J. Bowman and R. G. Myers, "Schooling, Experience and Gains and Losses in Human Capital Through Migration," Journal American Statistical Association, (September 1967), pp. 875-898.

[12]Calvin L. Beale, "Rural and Nonmetropolitan Population Trends of Significance to National Population Policy," Economic Research Service, U.S. Department of Agriculture, (February 1972).

[13]Ibid.